REMARKS/ARGUMENTS

Claims 1, 2, 4-7, 9-15, and 17-23 are pending in the application.

Claims 1-5, 7, 9-13, 15, and 17-19, and 20-23 are rejected under 35 U.S.C. 103 as being unpatentable over United States Patent 6,721,712 to Benyassine et al. (hereinafter "Benyassine") in view of United States Patent 6,658,027 to Kramer et al. (hereinafter "Kramer").

Claims 6, 14, 18, and 22 are rejected under 35 U.S.C. 103 as being unpatentable over Benyassine in view of Kramer and further in view of United States PG-Pub 2002/0037002 to Mizusawa et al. (hereinafter "Mizusawa").

Applicants respectfully submit that the cited references fail to disclose or fairly suggest each and every element of the claimed invention. Accordingly, as discussed below, withdrawal of the rejections is respectfully requested.

Rejections under Section 103

A. Claim 1

Claim 1 recites a system for providing frame rate conversion for audio data. The system includes "a first client configured to transmit audio data frames at a first frame rate; a second client configured to receive audio data frames at a second frame rate." A device stores audio frames received from the first client and is configured to "repackage the stored audio data frames into one or more frames for transmission to the second client at the second frame rate." As claimed, "a total amount of audio data received by the second client in the one or more repackaged frames is equal to a total amount of audio data transmitted by the first client in the audio data frames." Applicants respectfully submit that the cited references do not disclose or suggest a system with at least these features.

The Office Action cites Benyassine's conversion module 130 as teaching a device as claimed. See, Office Action at ¶8. In particular, the Office Action argues that conversion module 130 repackages encoded speech signal 101A into converted speech signal 101B. With regard to the amount of audio data transmitted, the Office Action contends that only frames containing background information (i.e., energy level and spectrum data) are dropped while all

of the frames containing speech audio data are forwarded to the receiver 140. See, Office Action at ¶10. Applicants respectfully submit that Benyassine's conversion module does not repackage audio data at a second frame rate while satisfying the requirement that the total amount of audio data received by the second client is equal to the total amount of audio data transmitted by the first client.

As discussed in the reference, conversion module 130 includes a rate decoding module 132. The function of the rate decoding module is to "process each frame of encoded speech signal 101A and to determine the particular bit rate at which each frame was encoded." See, Benyassine at col. 5, lines 59-61. If the frame is encoded at 8.5, 4.0, or 2.0 Kbps, then rate decoding module 132 determines that the frame contains actual speech activity. See, Benyassine at col. 5, lines 63-66. Frames containing actual speech are sent on to the receiver 140 without further processing. See, Benyassine at col. 5, line 66 – col. 6, line 2 ("Frames containing speech data, i.e., frames coded at 8.5, 4.0, or 2.0 Kbps, are sent to DTX-enabled vocoder 140 as part of converted speech signal without further processing." (emphasis added)); col. 10, lines 19-23 (speech frames sent without modification); col. 11, lines 37-42 (speech frames sent without further processing by conversion module). In other words, as disclosed in the reference, speech frames bypass the rate conversion module 134 and are not repackaged at a second frame rate.

According to Benyassine, frames that are encoded at 0.8 Kbps may be either re-encoded or dropped depending upon circumstances. See, Benyassine at col. 8, lines 12-15. These frames contain the background information such as energy and spectrum data. Unless a significant change in the background noise is indicated, background frames are dropped to save processing power. See, Benyassine at col. 8, lines 21-31. When the background frames are dropped, "less bandwidth is needed to transmit the encoded speech signal." See, Benyassine at col. 8, lines 34-37. In other words, the amount of data transmitted is less when background frames are dropped.

Thus, Applicants respectfully submit Benyassine does not disclose that conversion module 130 repackages audio data at a second frame rate while also transmitting a total amount of audio data that is equal to the total amount of audio data its receives. If the claimed audio data is read as including only "speech audio data frames" as indicated in the

Response section of the Office Action, then Benyassine does not meet the requirements of the claimed invention because Benyassine's conversion module 130 does not repackage speech audio frames into one or more frames at a second frame rate. As disclosed in the reference, frames detected as containing speech data are passed through to the receiver without modification. Applicants respectfully note that even some non-background audio frames are dropped if it is determined that a satisfactory reconstruction of the speech signal is still possible at the receiver. See e.g., Benyassine at col. 7, lines 13-19. In such cases, the total amount of audio data transmitted does not equal the total amount of audio data received at conversion module 130 even for non-background frames.

On the other hand, if the claimed audio data is read as including both frames containing speech data and frames containing background information, then rate conversion module 130 does not meet the requirement that the total amount of audio data transmitted equals the total amount of audio data received. As previously noted, dropping background frames reduces the quantity of data transmitted to the receiver and lowers bandwidth requirements. Accordingly, however audio data is interpreted, Benyassine does not disclose or suggest "a device configured to…repackage the stored audio data frames into one or more frames for transmission to the second client at the second frame rate…wherein a total amount of audio data received by the second client in the one or more repackaged frames is equal to a total amount of audio data transmitted by the first client in the audio data frames."

Kramer is not cited for and does not cure Benyassine's deficiencies as identified above. In particular, Kramer is merely cited for storing frames in a jitter buffer and outputting them at a constant rate. As cited in the Office Action, Kramer does not disclose or fairly suggest repackaging audio frames or that a total amount of audio data received by a second client in one or more repackaged frames is equal to a total amount of audio data transmitted by a first client. Accordingly, whether taken alone or in combination, Applicants respectfully submit that Benyassine and Kramer fail to disclose or fairly suggest each and every element as set forth in the claimed invention.

B. Claims 2-5, 7, 9-13, 15, 17-19, 20-23

For at least the reasons provided, the combination of Benyassine and Kramer fails to disclose or suggest all of the features of claim 1. Independent claims 7, 11, 15, and 20 should also be allowable for similar reasons as claim 1. Dependent claims 2-5, which depend from claim 1, claims 9 and 10, which depend from claim 7, claims 12 and 13, which depend from claim 11, claims 17-19, which depend from claim 15, and claims 21-23, which depend from claim 20, should also be in condition for allowance at least due to their dependence from independent claims 1, 7, 11, 15, and 20, respectively. Accordingly, withdrawal of the rejection of claims 1-5, 7, 9-13, 15, 17-19, and 20-23 under 35 U.S.C. 103 is respectfully requested.

C. Claims 6, 14, 18, and 22

Claims 6, 14, 18, and 22 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Benyassine in view of Kramer and further in view of Mizusawa. Claim 6 depends from claim 1, claim 14 depends from claim 11, claim 18 depends from claim 15, and claim 22 depends from claim 20. The rejection of claims 6, 14, 18, and 22 is premised on the assertion that the combination of Benyassine and Kramer discloses or suggests the features recited in claims 1, 11, 15 and 20 and Mizusawa discloses or suggests the remaining features of claims 6, 14, 18, and 22. As discussed above, however, the combination of Benyassine and Kramer does not disclose or suggest all of the features recited in claims 1, 11, 15 and 20. As best understood, Mizusawa provides no teaching or suggestion that would remedy this deficiency. Accordingly, withdrawal of the rejection of claims 6, 14, 18, and 22 under 35 U.S.C. 103 is respectfully requested.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 858-350-6100.

Respectfully submitted,

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